PIKES PEAK. RADIO AMATEUR ASSOC

Ø BEAT

COLO. SPRINGS, COLORADO

Rocky Mt. Div. Convention City
June 19 - 20

JANUARY 1971

JANUARY 13 MEETING OF PPRAA TO BE AT HEWLETT-PACKARD PLANT

The January 13 meeting of the PPRAA will be held at the Hewlett-Packard Co.,)00 Garden of the Gods Road.

Members have been asked to arrive at 7:15 pm., a little earlier than the usual meeting time, so that they can be signed in and escorted to the meeting room.

After a short business meeting starting at the usual time of 7:30, there will be an excorted tour of some of the Hewlett-Packard manufacturing facilities.

It is expected that we will be shown the CRT manufacturing processes (did you know that CRTs are made at HP's Colorado Springs plant?), printed circuit board etching, circuit board loading, HP's television studio and as many other aspects of their plant as possible during the evening.

Also planned is a demonstration of some of HP's latest equipment---a 250 mc oscilloscope, Time Domain Reflector (TDR) for locating transmission line faults and matching antennas, etc., as well as other equipment of interest to the ham fraternity.

A number of hams work at HP and as many of them as possible plan to be on hand for the meeting to answer your questions.

Please try to be there early so the

(Continued on Page 3)

'HAM' NICKNAME FOR AMATEUR RADIO FROM EARLY CALL LETTERS

By Peter J. Labowski, WØVCZ
(Reprinted from April 1961 Zero Beat)

The word "HAM" as applied to amateur radio dates back to 1908 and the call letters of one of the first amateur wireless stations operated by some members of the Harvard Club.

They were Albert S. Hyman, Bob Almy, and Peggy Murray. At first they called their station HYMAN-ALMY-MURRAY. Tapping out such a long name in code soon called for revision and changed the name to HY-AL-MU, using the first two letters of each name.

Early in 1909 some confusion resulted between signals from amateur wireless HYALMU and a Mexican Ship named HYALMO so the boys decided to use only the first letter of each name and the call became HAM. In the early pioneer unregulated days of radio, Amateurs picked their own frequency and call letters.

Then, as now, some amateurs had better signals than some commecrial stations. The resulting interference finally came to the attention of congressional committees in Washington and they gave much time to proposed legislation designed to critically

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Member, Amateur Radio News Service

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-o-

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The PPRAA meets the second Wednesday of each month in the U.S. Naval Reserve Training Center, Lake and Logan Streets, starting at 7:30 p.m. All radio amateurs and other interested persons are invited to attend.

Copy deadline for the FEBRUARY ZERO BEAT is January 27.

Editorial

MORE ON AMATEUR RADIO'S PAST AND FUTURE IN COLORADO SPRINGS

Along with the Christmas Cards we received in December came a letter of "protest" concerning what was evidently a "mis-statement of fact" in the short 20-year history of the PPRAA article written by Rosie Lewis, after talking to one of the PPRAA charter members, Jim Reynolds, WØJMB.

The letter was from Carl Drumeller, now W5JJ, presently editor of the "Collector and Emitter" of the Aeronautical Center Amateur Radio Club of Oklahoma City. Then a resident of Colorado Springs, Carl had the call W9EHC prior to World War II when Colorado was in the W9 area.

Carl wrote:

"It was with amazement that I read in your December issue that previous attempts to establish an amateur radio club in Colorado Springs had failed . . . perhaps for charging too high dues!

"The Pikes Peak Amateur Radio Association flourished between 1932 and 1942. The reason it was disbanded then was because 90% of its members went into military service. It was a club with a national reputation. In its ten years of life, it hosted two Rocky Mountain Division Conventions. The ROWH initiation it staged in a portion of the Cave of the Winds not open to the public was acknowledged as one of the most impressive ever held.

"You might ask Butch, WØGBX, for some more history, although Butch was a late-comer into its membership. Nearly all of the original members are Silent Key now. Joe Rohrer, the first President, still lives, though; he was still a student at Colorado College in those days."

Our apologies to Carl and the members of the Pikes Peak Amateur Radio Association and our thanks to Carl for filling in the "gap" in our history of amateur radio organizations in this area. Our only excuse is that being a "comparitive newcomer" to the Springs (1958 to 60 at Fort Carson and since April 1963 as a "confirmed resident") we had to rely on what we thought was the correct information passed on by an "old-timer."

But so much for "past history." What we are more concerned with is the future--the fact that this year--on June 19 and 20, we have the tremenduous task of staging another Rocky Mountain Division Convention which will come up to, or better yet--surpass, the one in 1966. Upon the success of this convention (and the further desires of the members of the PPRAA) will hing the question of whether we will "go further" and attempt to make Colorado Springs the

(Continued on Page 3)

ORIGIN OF 'HAM' NICKNAME

(Continued from Page 1)

limit amateur activity.

In 1911, Albert Hyman chose the controversial wireless regulation bill as the topic of his thesis at Harvad. His instructor insisted he send a copy to Senator David I. Walsk, a member of one of the committees hearing the bill. The Senator was so impressed that he sent for Hyman to appear before the committee. He was put on the stand and described how the little amateur station was built and he almost cried when he told the crowded committee room that if the bill went through they would have to close their stations because they could not afford the license fees and all the other requirements which were set up in the bill.

The debate started and the little stationtion HAM because the symbol of all little amateur stations in the country crying out to be saved from those who didn't want them around. The bill went to the floor of Congress and every speaker talked about the poor little station HAM.

The whole story is a matter of record and nationwide publicity associated station HAM with amateurs.

-o-o-o-

Don't forget--this is 1971 and therefor your 1971 dues are payable any time.

EDITORIAL

(Continued from Page 2)

locale of the 1976 national ARRL Convention which has been promised to Colorado.

It's nice to look back on history, yes--but it is more important to plan for the future. Without that planning, and the hard work of all to see that the plans are properly carried out, we will fail in our "duty" to give future generations of PPRAA members a good history of the "70s" to look upon in their future study of amateur radio in Colorado Springs.

As we wish each of our readers a Very Happy New Year, we also remind them that 1971 will be a Very Busy New Year which can mean much for the future of the PPRAA and its activities.

---Frank, WØHWH

-o-o-o-

JANUARY MEETING AT HP

(Continued from Page 1)

meeting can get started on time. Refreshment will be served.

Bring along the XYLS---they should also find the tour of the Hewlett-Packard factory of interest.

When you arrive, please park in the parking lot at the visitors' entrance and enter the main door. Your escort will be waiting there to meet you. Remember it is at 1900 Garden of the Gods Road.

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ROSIE'S REPORTINGS

By Rosemarie Lewis, WAØMNL

-rr-

RTTY on 2 meters?

Bob Shriner, WAØUZO, tells us of plan for a RTTY net using a repeater link system. The signal would be slid under the audio and not interfere with fone operators. They plan to be ready for some testing about March, meanwhile he asks those that are interested to get their gear in gear.

-rr-

RTTY on 2 new? Just notices in September of 1961 Zero Beat a note where Jerry Winnings, KØBTS, has a page primarily Teletype on 2 meters.

-rr-

Ten people from the Springs attended the Pueblo Ham Club Christmas party, with prizes for all, a good crown and fellowship.

-rr-

Elmer Schladweiler, WAØWJY, reports that code classes are held every Thursday evening, starting at 7 o'clock at 23Ø East Kiowa (basement of the Police Station). For anyone wishing to learn the code and secure an Amateur ticket, this is a good place to start. The Technical Committee will gladly help with theory, antenna, rig problems, etc.

A second code class is being started Tuesday evenings, same place and time, with John Summers, WAØHHN, in charge. This is for those wishing a faster code speed. We've had some requests for amateurs to get a chance to bring up their speed a little for upgrading as well as just for the heck of it. These instructors give of their time and talents and the club appreciates their work and hopes people will take advantage of the opportunity.

-rr-

Rhea Allison, K5RDY/Ø, reports a FB trip to Mexico, with her "catching" a fish only three feet only.

-rr-

Elmer, WAØWJY, is installing a KWM 2 mobile and his enjoying his Drake T4XB and RB4 in QTH.

-rr-

Larry Freymouth, WA0ZWH, has passed his Advanced class. He's 14. His younger brother, Terry, WNØZWG, age 12, is working for his. They're sons of Russell, WØSOS.

-rr-

Wedding Bells for:

Rick Hughes, WBØAXI, and Sulvia Swan on December 19.

Dan Remy, WAØKXO, and Barbara Pontious on December 26.

Linda Lewis, WAØMNM, and Jim Vidmar on January 9.

Best wishes to the newlyweds.

-rr-

Club dues for full membership is $3 per year, Associate, $2. This includes a subscription to Zero Beat. Family membership after the first $3 is $1 for each additional amateur in the family, and Associate members in family are $1 after the first fee is paid. It is hoped the OMs sign up their gals as Associates, with the convention coming up and the women's activities being an important part. The women will almost need a convention within a convention. Membership to ARRL, if paid through the club, is $6, this includes QST. Special rates for family ops is $2 per member.

-rr-

I've been asked for a sked of nets, so here it is. All nets shown are daily, except where otherwise noted.

Hambutchers Net	7280	1805 (11:05 pm)
High Noon Net	7280	1900Z
Colo. Novice Net	7190	Sunday 2100 Z (2 pm)
Colo. Code Net	3657	0130 Z (6:30 pm)
Columbine Net	2989	Mon. thru Sat. 0200Z
Silver State Net	1981.5	0230Z
Twn 1	3570	0300Z
Pan	3675	0330Z
Twn 2	3570	0530 Z

PPRAA TO HOST FIRST COUNCIL OF AMATEUR RADIO CLUBS MEET JAN. 16

By Chuck Myers, WAØZCS
(PPRAA Delegate to the Council)

The PPRAA will host the first quarterly meeting of the Colorado Council of Amateur Radio Clubs, to be held Saturday, January 16, starting at 2 p.m., in the Civil Defense Center, in the basement of the Colorado Springs Police Station, 230 East Kiowa Street.

Permanent officers of the council will be elected at this meeting and long-range projects will be discussed. Anything you feel should be brought before the Council at the time of the meeting, please bring it to the attention of our president at the January 13 PPRAA meeting.

Volunteers are needed for registering delegates and visitors, setting up chairs, tables, making coffee, etc. An informal dinner and get-together is planned for Saturday evening after the meeting.

Since delegates will be coming from all parts of the state, some may want to stay in the Springs overnight. If you have a guest room you would like to share with a fellow amateur for the night, or you want to volunteer your help at the meeting, will you please get in touch with me at 632-0848 or with Oak Stockton, KØROL, 596-1395.

All PPRAA members are invited to attend the meeting and dinner. Let's show our fellow Colorado amateurs some real PPRAA Hospitality!!

PRESIDENT'S COLUMN

By Rosemarie Lewis, WAØMNL

I hope the PPRAA Christmas Dinner helped you have a happy holiday season. Seventy four persons attended and Dot's served an excellent meal. The High Country 4 barbershop quartett will now be known as the Fabulous 4.

January sounds like an exciting month with the meeting and tour of Hewlett-Packard on the 13th. PPRAA is hosting the Colorado Council of Radio Clubs meeting January 16 and participating in SET January 30 and 31. (I'm sure our EC has a worthwhile exercise in store.)

Details of these events should appear elsewhere in this issue, so with a reminder that our February meeting will be a auction held at the Naval Reserve Training Center--I sign 73,

---Rosie, WAØMNL

-o-o-o-

(From Colo.-Wyo. Army MARS Bulletin)

Half the charm of the "good old days" is that we were 20 years younger.

Always put off until tomorrow what you were going to mess up today.

Miniskirts gave us a generation of girls who are all legs--boys who are all eyes.

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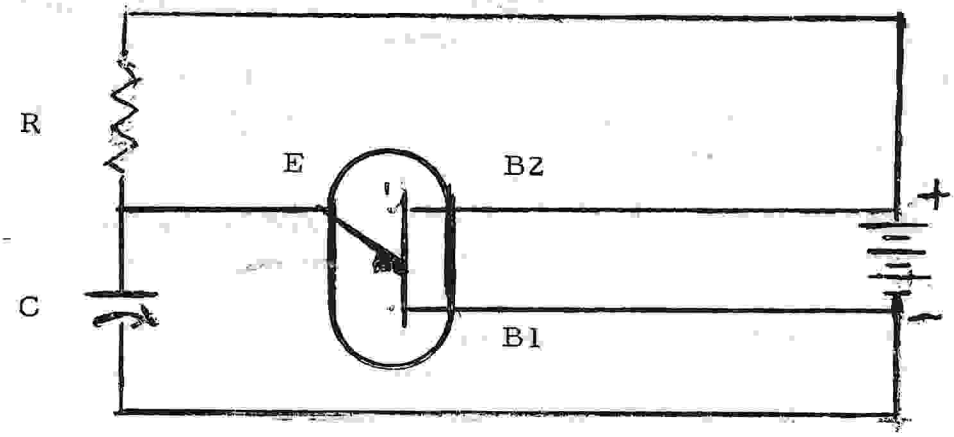
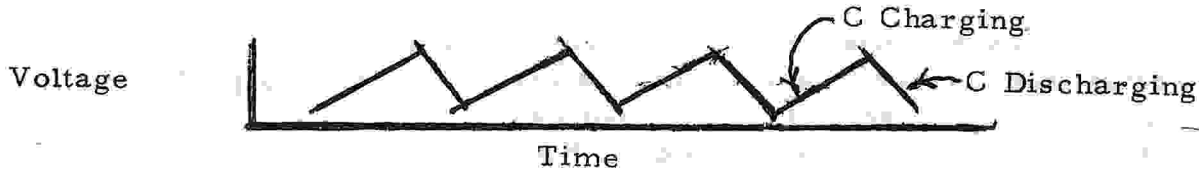
UNDERSTANDING TRANSISTORS

By Jim White, WB6RAG
(From the Tulare County (Calif.) Radio Club "Gridleak"
via the Central California Radio Council "Circle")
LESSON 17

THE UNIJUNCTION SAWTOOTH OSCILLATOR





An extremely simple oscillator circuit can be constructed consisting only of the unijunction transistor, a resistor and a capacitor. See the above diagram.

When the power is applied, the capacitor begins to charge at a specific rate which is determined by the size of the capacitor and the value of the resistor. When the voltage across the capacitor rises to approximately .6 volt greater than the voltage present in the cathode of the emitter junction, the diode will be forward biased and thus in a conducting state.

The capacitor rapidly discharges through the path of low resistance, i.e. through the forward biased diode, to base 1, the voltage across the capacitor will then begin to drop until such time as the diode becomes reverse biased. Keep in mind that the voltage present at the cathode drops close to B- potential when the diode is in a forward-biased state. The peak-to-peak signal voltage at the emitter will be almost equal to our close calculation of the intrinsic standoff voltage.

PLEASE NOTE: Do not confuse the .6 volts with the .6 'instrinsic standoff ratio.' The two figures are not related. The reference to .6 volts is the normal voltage drop appearing across a forward biased silicon diode. Another point which may require clarification is that the resistance from the cathode to base 1 also is much reduced when the emitter diode becomes forward biased. This is due to "avalanche conduction."

RTTYERS---HERE'S AN EASY METHOD OF CHECKING SPEED OF YOUR MACHINE

Since more and more PPRAA members are becoming interested in RTTY, the following, originally appearing in the Ohio MARS news letter and reprinted in the Denver Radio Club "Round Table" is reprinted.

"Did you know that the speed of a model 15 page printer (RTTY) can be correctl adjusted without using a tuning fork?

"To do it, type the numerals 1 through

(Continued on Page 8)

NEXT ARRL SET SCHEDULED FOR JANUARY 30 AND 31

The next ARRL Simulated Emergency Test will take place January 30 and 31, according to ARRL Official Bulletin 297...

Participation in the test bymembers of PPRAA will probably be discussed at the January 13 meeting by George Kowalski, E. C, WØGCH.

According to the ARRL bulletin:

"This serious operating exercise tests both emergency preparedness on a community to community basis as well as long haul traffic facilities. There is a part for every amateur in SET. Help do your share to justify the amateur service in terms of public interest, convenience and necessity. Plan to cooperate by coordinating with your local officials . . . SET rules will appear in the December issue of QST."

-o-o-o-

WANTED---Vertical antenna, novice crystals, coaxial relay, SWR bridge and meter. Steve Kaplan, Phone 471-4909.

-o-o-o-

(From the Crescenta Valley Radio Club "QSX" via the CCRC "Circle")

This could apply to most phone hams: "It is alright to hold a conversation, but you should let go of it now and then!"

MARK THESE DATES ON YOUR CALENDAR FOR 1971

So that you can make plans to miss as few (or not any) of the PPRAA meetings during 1971, these are, at present, meeting dates for the PPRAA during 1971.

Unless otherwise noted, present information is that meetings will be held at the U. S. Naval Reserve Training Center, Lake and Logan Streets, starting at 7:30 p. m.

Any changes in location or time will appear in future issues of Zero Beat.

January 13: 7:15 p. m., Hewlett-Packard plant, 1900 Garden of the Gods Road. (Meeting and tour of plant).

February 10: Semi-annual auction.

March 10: Program to be announced.

April 14: Program to be announced.

May 12: Program to be announced.

June 9: Program to be announced.

June 19-20: Rocky Mountain Division ARRL Convention, Colorado Springs Municipal Auditorium.

July 14: Program to be announced. A picnic will also be held this month.

August 11: Progam to be announced.

September 8: Semi-annual auction.

October 13: Annual official business meeting. Election of four directors for two year terms and four club officers for 1972.

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RTTYERS---HERE'S AN EASY METHOD OF CHECKING SPEED OF YOUR MACHINE

(Continued from Page 6)

Ø six times for a total of 60 numerals. Return the type basket to the left hand margin. Now, looking at a watch or a clock with a second hand, hold the space bar down for exactly ten seconds. Release it and if the speed is correct at 60 words a minute, the carraige will end up directly below the last numeral. If the carraige ends up to the left, the motor is too slow and must be Speeded up. If the carraige is past the last numeral, the speed is too fast and must be slowed down.

"Other speeds can be set using the following rule. The number of characters typed in ten seconds equals the speed in words per minute. Of course it is not necessary to type the numbers one through ten the required number of times but it does make the checking easier."

-o-o-o-

Don't forget January 13 meeting at H-P.

ZERO BEAT EDITOR
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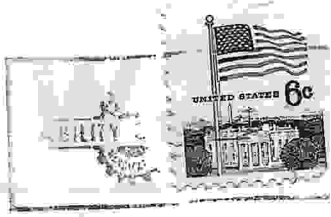

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